Sen 5500

Weighing Indicator

User Manual

Version: 2012.10

- Please read the user manual carefully before using
- Please keep the user manual properly for future reference

Attention In Use

▲ The connection between load cell and indicator must be reliable. The shield cable of load cell must be grounded firmly.
▲ Do not plug or unplug the connection wire while the indicator is powered up to avoid damages to indicator or load cell by static electricity.
▲ Indicator and load cell are static sensitive device and anti-static measures must be adopted in use.
▲ In the thunderstorm season, a reliable lighting protection measure must be installed to avoid damage of indicator or load cell by lightning. Make sure the safety of operator and the safe operation of weighing equipment and associated equipment.
▲ Do not use in the place where there is inflammable gas or vapor. Do not use in the pressure hopper system.
▲ Keep the indicator and load cell away from high electric field, magnetic field, strongly corrosion object and flammable object.
▲ Do not clean the housing with strong solvent (such as benzol and nitro oil).
▲ Do not inject liquid or conduction grain into the indicator to avoid damage to indicator or electric shock.
▲ Do not open the lead sealing without authority from department of electrical supervision. Calibration can not be done without breaking the lead sealing.

☆ Rechargeable battery is consumable and is not covered by guarantee.
☆ To prolong the life of use of rechargeable battery, be sure to use after it is fully charged.
☆ If the indicator won't be used for long time, it is must be recharged once in 2 months and charged for 20 hours each time.
☆ Be carefully while moving or installing to avoid strong shaking or impact, to prevent short circuit or damage to rechargeable battery.

◆The indicator should be placed flatly and not be in the straight sunshine for clear indication and long-term service life.
◆The indicator should not be placed in a vibrating area full of dust, and not in a sloppy environment.
◆Before connecting or disconnecting indicator and peripheral equipment, powder supply of the indicator and other devices should be firstly switched off !
◆Regulations about external connection in the manual should be strictly observed. It is not allowed change the connection at random.
◆It is not allowed to open the indicator, otherwise we do not guarantee to repair. There is high voltage inside the indicator. Non-professional people are not allowed to repair to avoid more serious damage to system and human or accident.
◆If not man-made trouble happens within one year after the date of sale , the indicator is under regular service condition, please send the troubled indicator and guarantee card (the serial number should be coincident) to the special repair shop or the supplier.
◆ While it is over guarantee time, man-made trouble or other accidental damage, the manufacturer will repair with charge.

Printed version might be slightl y different fr om product because of the improv ement of product function. Please contact the manufacturer from latest version.

Dear clients, thank you for choosing Sentronik products.

Please read the user manual carefully before using

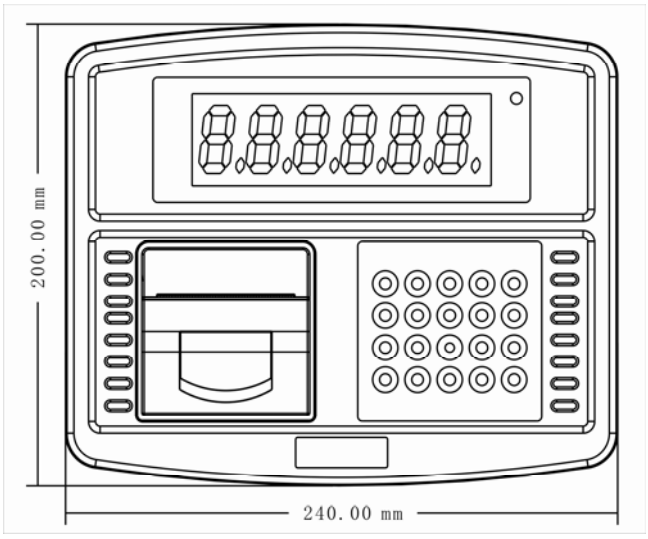
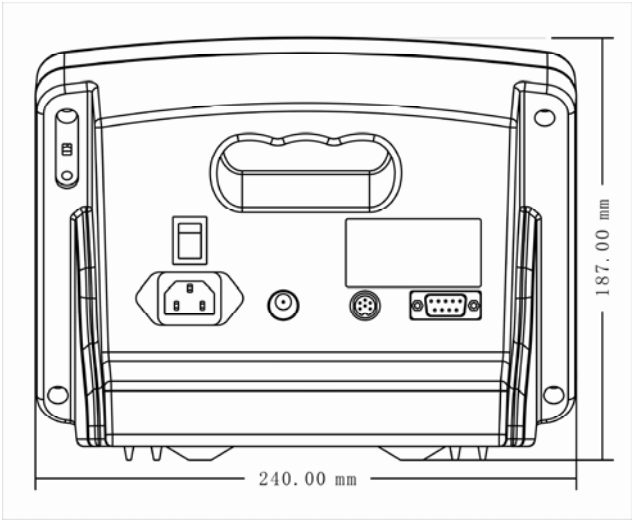
The right of revising this manual is preserved.

1）Technical parameters

- Input Sensitivity： ≥1.5uV/e
- A/D Conversion： Δ－Σ technique，20bit
- Supply bridge Voltage of load cell： DC 5V, can connect 1-4 pcs of 350Ω strain gauge load cells；
- Connection with load cell：use 4 wires
- Division value： 1/2/5/10/20/50/100 optional
- Display： 6 bits LCD display
- Clock display： Display the year/month/day, hour/minute/second, automatic leap year, leap month. No need to reset after power off.
- Character setting： Chinese/English is available for printing
- Scoreboard interface: current loop serial output method, 600bps
- Printer interface： Inner thermal micro-printing,57mm width paper, diameter of the paper reel≤40mm
- Power supply：AC110~220V，50~60Hz, can external connect DC 6V/7Ah free maintenance lead-acid battery(optional).
- Size of the indicator： 240*173*187mm(long*wide*height)
- Weight of the indicator： about 1.15 (kg)
- Operation environment： Operating temperature: 0℃～40℃
  Operating Humidity：≤85％（RH），No condensation
- Storage environment:：storage temperature: －10℃～50℃
  Storage Humidity：≤95％（RH），No condensation

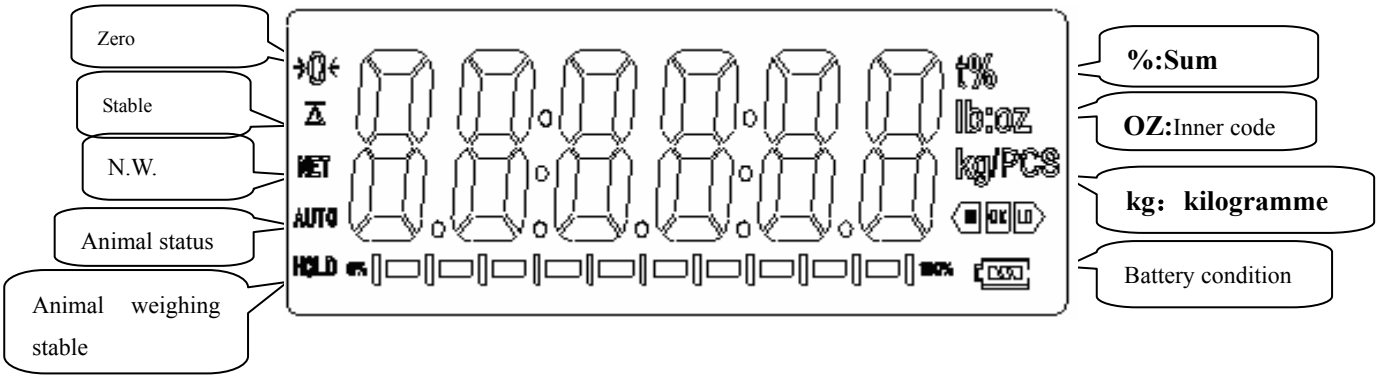
2）Installation

2.1 Indicator Diagram Sketch

Front board	Back board
	

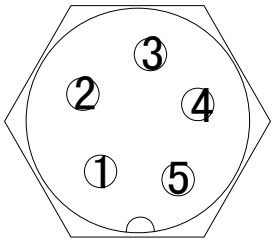
Remark：The 9 hole interface at back is for connection with load cell,9 pin interface is for scoreboard connection.

2.2 Screen of the Indicator



	⑤	Shield cable	SHIELD

2.3 Load Cell with Indicator Connection



Description	
①	Load cell +Excitation
②	Load cell -Excitation
④	Load cell +SIG
⑤	Load cell -SIG

This indicator is connecting with 4 wires cable, user must make the short circuit for positive excitation and positive feedback、negative excitation and negative feedback

▲！The connection of load cell and indicator should be relible. The shield wire of load cell must be connected to the earth. It is not allowed to connect or disconnect with power supply. Avoid damage to indicator or load cell by static electricity.

▲ ！Load cell and indicator are static sensitive devices， so static-proof measures should be adopted.

2.4 The connection with scoreboard

Scoreboard Communications	Scoreboard mating plug	DB9 core terminals
	③	⑨
	⑤	⑤

▲！The connection between scoreboard and indicator scoreboard output must be correct, if with wrong connection, it will cause damage to output interface of indicator or input interface of scoreboard .Even it will damage seriously indicator and scoreboard . Special connection cable shall be used. The scoreboard will display nothing when the indicator is under calibration status.

3) Operation

3.1 Startup and startup Auto-Setting Zero

1、Power on and turn on the power switch, the indicator will have self-inspection .Then it will enter weighing status directly.

2、when startup, if the displayed data is not zero, but still in setting range, the indicator will set zero automatically. Startup zero setting rand and method is refer to the calibration chapter

During normal working, the calibration switch should be on forbidding position (down place)

3.2 Manual zero setting (semi-automatic)

1、 When the displayed data is not zero, but still in the range of setting, the key【ZERO】can be operated. Otherwise, it is not available. Zero setting parameter selection and setting is refer to the calibration chapter.

2、 Zero setting is available only when the stable indication is light.

3.3 Tare

1、Under weighing status and with stable platform, indicator can do tare operations continuously.

2、When it conform to zero setting conditions, press 【ZERO】to set tare as zero. The light of net weight will be off.

3.4 The Unit of Weight shift function operation.

1、Under the weighing to display the gross weight is 0, Press 【weigh】to switch KG with lb unit..

2、Setting up a unit of weight, the parameters stored in the internal EEPROM, when restart the Indicator the unit of weight to keep previous set.

3.5 Operations of animal scale function

Step	Operations	Display	Note
1	Press[SET] Press[0] Press[ENTER]	[******]	Under weighing status
2			Under animal scale weighing status, press [WEIGHING] to exit

3.6 ISN code operations

Step	Operations	Display	Note
1	Press[SET] Press[2] Press[ENTER]	[******]	Under weighing status
2			Under ISN code status, press [WEIGHING] to exit

3.7 Setting for backlight、language and printing sn

Step	Operations	Display	Note

1	Press[SET] Press[1] Press[ENTER]	[US]	Under weighing status
2	Press[000] Press[ENTER]	[ST XYZ] [ST 000]	Note: Auto-zero setting after setting Z value,refer to note 1 Default setting in Factory:000
3			Weighing status

Note1:special statement, for english verison indicator, Y value is always 1.

Input value	0	1	2
X：screen backlight	Auto-backlight	Backlight off	Backlight on
Y：print language	chinese	english	——
Z：clear printing serial no.	Not clear	clear	——

When accumulation symbol ”%” is on ,print accumulated weight value.

3.8 Printing

1) No tare printing

step	description	operations	display	note
1	Load goods		[******]	Showing current weight
2	stable	Press[PRINT]	[Print]	Print current data
3	Printing is finished		[******]	Return to weigh after printing

2)Tare printing

step	description	operations	display	note
1	Load tare		[******]	Showing current weight
2	stable	Press [TARE]	[0]	Showing N.W.=0
3	stable	Load goods	[******]	Showing current weight
4	stable	Press[PRINT]	[Print]	Print current data
5	Printing is finished		[******]	Return to weigh after printing

3) Accumulation printing

When accumulation symbol ”%” is on ,the printed data is accumulated weight value. Press [CLEAR], accumulation symbol ”%” is off, the accumulated data is clear up.

4) Complementary printing

Press [REPRINT] to print the latest record.

Note: If the power shows 1 grid, please print after charging up or connecting with AC power supply in time. If the weight is smaller than 5 intervals value, it can not printing.

3.9 Accumulation function

1、Sum operation. Under weighing status, to press[Σ] after platform is stable ,then the indicator will display times of accumulation and total weight, then return to weighing status. It can start to sum again only after the scale returns to zero.

2、Clear up of the summary data. Under weighing status, to press [CLEAR] to clear up records of sum times and total weight.

3、Checking summary data. Under weighing status, to press [Σ] when the indicator displays zero. The indicator will show summary times first and total weight, then return to weighing status .

Note：The summary data can not be saved after power off ,during summing status, the light of ”%” is

on .

4.0 Date and time setting

1、Under weighing status, press[Date] then the indicator will display current date. If correct, then press [ENTER] or [WEIGHING] to exit .If not correct, input numbers and press [ENTER]
2、Under weighing status , press[TIME] then the indicator will display current time and run automatically. If correct, then press [WEIGHING] to exit .If not correct, input numbers and press [ENTER].

3.11 Use of storage battery(Storage battery is extra requirement)

1、With storage battery and AC power supply connected, if not able to start up the indicator, it maybe in condition of lower power supply . Please wait to charge the battery or operate with AC power after unloading the battery.
2、The red connects to the positive pole of stock battery ,the black connects to negative pole .Please note!(the connection line of storage battery is optional)
3、If only with storage battery, there is a signal on the display of indicator showing the battery condition. With full lights on, it means enough power .If only lower one is light, please charge up in time.
4、Please charge up the battery completely at first time .If without use for long time, we suggest to charge the battery each 2 months for 20hours.Move the devices slightly in order to avoid strong shock and impact which easily causes short circuit inside of the battery, and destroy the battery.
Specially warning: If without confirmation from technology monitoring department, please do not break the seal on the product, can not calibrate without breaking the seal .

4 Information prompt

4.1 Normal information prompt

Display	Note
Print	Please wait, data are transmitting between indicator and printer
Lbat	Power is too low to print ,please charge up.

4.2 Error prompt

Display	Note
Err 01	Error on automatic zero-setting or by hand
Err 02	Error on summary
Err 03	overloading
Err 06	Error on tare operations
Err 16	Error on date and time setting
Err 22	Error on clock cores
Err 19	Not able to print when zero, minus weight or not stable weight
Err P	Error on printer
Err 18	Error on parameter setting

Err 09	Error on inspection of calibration data

Annex 1: Function of charging for SEN 5500

It is available to charge up with DC currency, please use 6V/7Ah for storage battery. Interface connection is negative for outside and positive for inside.

If the battery is with opposite connection, it will make damage to the indicators .Please note.

This product is not provided with storage battery, if you need, please order additionally.

Note: 1.We do not guarantee damage to the battery itself with wrong connection.

2.When charging up, if fail to start up the indicator maybe for lower power, please try again after charging.

Annex 2: Print form for SEN 5500

Weight list

Item:	0001
Date:	10-06-06
Time:	06:06:06
G.W.:	8000(kg)
Tare weight:	1300(kg)
N.W.:	6700(kg)

Weighing Bill

S.N.:	0001
Date:	10-06-06
Time:	06:06:06
GW:	8000(kg)
TW:	1300(kg)
NW:	6700(kg)

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